#### MILITARY SPECIFICATION

# CONNECTORS, PLUG, ELECTRICAL, WATERPROOF (CATHEDRAL SHAPE, SHELL SIZE 20, MALE INSERTS)

## 1. SCOPE

1.1 Scope. This specification covers the detail requirements for the following types of field-serviceable, shell-size 20, cathedral-shape, waterproof, electrical-plug connectors with male inserts:

UW1320MA11 UW1320MA15 UW1320MA17 UW1320MB17 UW1320MB19 UW1320MB21 UW1320MB21

1.2 Ratings. - Connectors covered by this specification shall have the electrical ratings specified in table 1.

Table 1 - Electrical ratings

| Connector type                  | Limiting operating voltage (sea level) |       | Nominal<br>current |
|---------------------------------|--|-------|--------------------|
|                                 | AC                                     | DC    | Amperes            |
| 'UW1320MA11 to UW1320MA17, incl | 900                                    | 1,250 | 41                 |
|                                 | 900                                    | 1,250 | 22                 |

SHEET 1 of 4 SHEETS

# 2. APPLICABLE DOCUMENTS

2.1 The following specifications, of the issue in effect on date of invitation for bids, form a part of this specification:

#### SPECIFICATIONS

#### MILITARY

MIL-C-12520 Connectors, Plug and Receptacle (Electrical, Water-proof); and Accessories; General Specification for.
MIL-C-12520/9A Connectors, Receptacle, Electrical, Waterproof (Shell Size 20, Female Inserts).

(Copies of specifications required by contractors in connection with specific procurement functions should be obtained from the procuring agency or as directed by the contracting officer.)

# 3. REQUIREMENTS

- 3.1 Requirements.- Requirements shall be in accordance with Specification MIL-C-12520, and as specified herein.
- 3.2 Design and construction. Connectors shall be of the design, construct' and physical dimensions specified on figure 1.
- 3.2.1 Assembly. Connectors shall be capable of being disassembled to allow access to the contact terminals without the use of special tools.

# 4. QUALITY ASSURANCE PROVISIONS

- 4.1 Sampling and inspection. Sampling and inspection shall be in accordance with Specification MIL-C-12520, and as specified herein.
- 4.2 Test and mating receptacles. The test and mating receptacles shall be in accordance with the applicable type covered by Specification MIL-C-12520/9A.
- 4.3 Dielectric withstanding voltage. Connectors shall be subjected to a test potential of 2,800 volts root mean square (rms).

### 5. PREPARATION FOR DELIVERY

5.1 Preparation for delivery shall be in accordance with Specification MIL-C-12520.

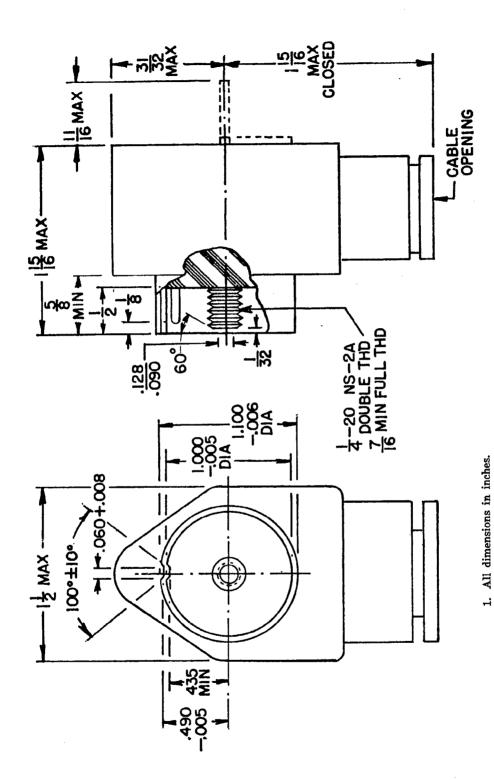


FIGURE 1. Plug shell and male insert dimensions

2. Unless otherwise specified, tolerances are  $\pm$  1/61 on fractions and  $\pm$  2° on angles.

- 6. NOTES
- 6.1 Notes. In addition to the notes specified herein, the notes specified in Specification MIL-C-12520 are applicable to this specification.
- 6.2 Intended use. Connectors covered by this specification are intended for use where field-serviceable, waterproof, electrical connectors are required.
- 6.2.1 Mating receptacle connectors. Mating receptacle connectors are in accordance with Specification MIL-C-12520/9A.
- 6.2.2 Cover and chain assemblies. Cover and chain assemblies are in accordance with style 2N of Specification MIL-C-12520/13A"Cover and Chain Assemblies (Internal Threads, for Use on Waterproof Connectors)".

NOTICE: When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or therwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

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